## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	9	(spherical or particulate or particles) and chalcopyrite	EPO; JPO	ADJ	ON	2010/07/16 14:02
L2	1194	(spherical or particulate or particles) and chalcopyrite	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:02
L3	85	(spherical or particulate or particles) and chalcopyrite and core	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:03
L4	409	(spherical or particulate or particles) same chalcopyrite	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:08
L5	89	(spherical or particulate or particles) same chalcopyrite same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:08
L6	40972	(spherical or particulate or particles) same (copper or cu or group I?) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:12
L7	16178	(spherical or particulate or particles) same (copper or cu or group I?) same (mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:13

L8	562	7 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:14
L9	1450	(spherical or particulate or particles) same (copper or cu or group I?) same (sulfur or selenium) same (mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:14
L10	33	9 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:15
L11	575	(grain) same (copper or cu or group I?) same (sulfur or selenium) same (mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:19
L12	273	(core) same (copper or cu or group I?) same (sulfur or selenium) same (mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:20
L13	29	11 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:20
L14	7	12 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:20
L15	14	12 and (diode)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:20

L16	7	11 and (diode)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:20
L17	48	13 or 14 or 15 or 16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:20
L18	7	(spherical or particulate or particles) same (copper or cu or group I?) (film or layer or precursor or preparatory) same (sulfur or selenium) same (mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:30
L19	22	(spherical or particulate or particulate or particles) same (copper or cu or group I?) (film or layer or precursor or preparatory) same (sulfur or selenium) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:31
L20	3481	(spherical or particulate or particulate or particles) same (film or layer or precursor or preparatory) same (sulfur or selenium) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:44
L21	288	(spherical or particulate or particles) same core same (precursor or preparatory) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:45

L22	25	21 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:51
L23	7548	(spherical or particulate or particles) same core same (film or layer) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:52
L24	237	23 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 14:53
L25	49	CHITTIBABu.in. and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 15:15
L26	11	25 and core	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 15:16
L27	86636	(spherical or particulate or particles) same (coating or coated or coat) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 15:23
L28	51120	((spherical or particulate or particles) with (coating or coated or coat)) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 15:23

L29	793	((spherical or particulate or particulate or particles) with (coating or coated or coat) with semiconductor) same (electrode or contact or mo or molybdenum)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 15:24
L30	251	29 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/16 15:27
L31	149	136/250.ccls.	US-PGPUB; USPAT	ADJ	ON	2010/07/16 15:36
L32	4	("3683307").URPN.	USPAT	ADJ	ON	2010/07/16 15:42
L33	6	("4407320"   "5081069"   "5785768"   "6156968"   "6180870"   "6281427").PN. OR ("6420644").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 15:55
L34	6633	cigs	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 16:09
L35	511	34 and (precursor or preparatory) and (mo or molybdenum)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 16:10
L36	122	34 and (precursor or preparatory) and (mo or molybdenum) and ((sulfur or selenium) with atmospher\$2)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 16:10
L37	122	34 and (precursor or preparatory) and (mo or molybdenum) and ((sulfur or selenium) with atmospher\$2) and glass	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 16:11
L38	56	34 and (precursor or preparatory) and (mo or molybdenum) and ((sulfur or selenium) with atmospher\$2) and glass and (pvd or cvd)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 16:17

L49	101	34 and (first with (group I? or cu or copper)) and (mo or molybdenum) and ((sulfur or selenium) with atmospher\$2) and glass	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 16:41
L50	28	("4128733"   "4465575"   "4571447"   "4581108"   "4638111"   "4680422"   "4684761"   "4703131"   "4915745"   "4940604"   "5045409"   "5151385"   "5356839"   "5436204"   "5523022"   "5728231"   "5730852"   "5769964").PN. OR ("6323417").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16
L51	16	50 and seleni?ation	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 16:55
L52	9	50 and seleni?ation and (cvd or pvd)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 17:00
L53	2	50 and (seleni?ation with pressure)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 18:10
L54	1	cis with soda lime glass with zno	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 18:58
L55	115	cis and molybdenum and soda lime glass and zno	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 18:58
L56	7	cis and (molybdenum with thickness) and soda lime glass and (zno with thickness)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 18:59
L57	2	cis and (molybdenum with thickness) and float glass and (zno with thickness)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 19:15
L58	3	cis and (molybdenum with thickness) and (float near1 glass) and (zno with thickness)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 19:15

L59	130	cis and ((cis or absorber or semiconductor) with (thickness or nm)) and (float near1 glass or soda near1 glass)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 19:18
L60	1800	cis and kcn	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 20:01
L61	255	cis and kcn and glass and mo	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 20:02
L62	8	61 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 20:02
L63	8	"6,429,369"	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 20:04
L64	385	cis and potassium cyanide and glass and mo	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 20:07
L65	4	64 and (solar or photovoltaic)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/16 20:07
S1	7	("3736476"   "3998659"   "4173494"   "4335266"   "4581108"   "5567469"   "5578503").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:35
<b>S</b> 2	7	("3736476"   "3998659"   "4173494"   "4335266"   "4581108"   "5567469"   "5578503").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:36
S3	7	S1 or S2	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:36
S4	34	"4407320"	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:38
<b>S</b> 5	41	S3 or S4	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:39
S6	5	S5 and (mo or molybdenum)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:39
S7	2	"10574633" or "10574378"	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:44
S8	10217	136/243-265.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:53
S9	3804	S8 and (spherical or grain or particulate or particles)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:53

S10	2220	S8 and (spherical or grain or particulate or particles) and (cig or indium or gallium)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:54
S11	762	S8 and (spherical or grain or particulate or particles) and (cig or ((selenium or sulfur) and (indium or gallium)))	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:54
S12	386	S8 and (spherical or grain or particulate or particles) and (cig or ((selenium or sulfur) and (indium or gallium))) and (mo or molybdenum)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:55
S13	10	(scheuten near1 jaques or volker near1 geyer or patrick near1 kaas).in.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:56
S14	12	scheuten.as.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 19:57
S15	23	scheuten.as.	EPO; JPO	ADJ	ON	2010/07/15 19:57
S16	19	(scheuten near1 jaques or volker near1 geyer or patrick near1 kaas).in.	EPO; JPO	ADJ	ON	2010/07/15 19:57
S17	6	(S13 or S14 or S15 or S16) and (spherical or grain or particle or particulate)	EPO; JPO	ADJ	ON	2010/07/15 19:58
S18	18	(S13 or S14 or S15 or S16) and (spherical or grain or particle or particulate)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/15 19:58
S19	6	("6488770"   "6562363"   "7019208").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/15 20:01

S20	3	"20030102023"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/15 20:02
S21	1	cigs and 136/250.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/07/15 20:03
S22	307	S8 and (spherical or particulate or particles) and (cig or ((selenium or sulfur) and (indium or gallium))) and (mo or molybdenum)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 20:12
S23	96	S8 and (spherical) and (cig or ((selenium or sulfur) and (indium or gallium))) and (mo or molybdenum)	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 20:12
S24	96	S22 and core	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/07/15 20:13
<b>S</b> 25	21	(spherical or particulate or particles) and (cig or ((selenium or sulfur) and (indium or gallium)))	EPO; JPO	ADJ	ON	2010/07/15 20:19
S26	3	(core) and (cig or ((selenium or sulfur) and (indium or gallium)))	EPO; JPO	ADJ	ON	2010/07/15 20:20
S27	6	136/250.ccls.	EPO; JPO	ADJ	ON	2010/07/15 20:23
S28	149	136/250.ccls.	US-PGPUB; USPAT	ADJ	ON	2010/07/15 20:23
S29	44	S28 and (cigs or gallium)	US-PGPUB; USPAT	ADJ	ON	2010/07/15 20:23
S30	55	S28 and (cigs or copper)	US-PGPUB; USPAT	ADJ	ON	2010/07/15 20:24
S31	0	S28 and chacogen\$5	US-PGPUB; USPAT	ADJ	ON	2010/07/15 20:26
S32	0	S28 and chacopyrite	US-PGPUB; USPAT	ADJ	ON	2010/07/15 20:27

S33	15	S28 and (group near1	US-PGPUB;	ADJ	ON	2010/07/15
			USPAT			20:27
S34	1 a	S28 and chalcopyrite	US-PGPUB;	ADJ	ON	2010/07/15
			USPAT			20:28

## 7/16/2010 8:16:58 PM

 $\textbf{C:} \ \textbf{Documents and Settings} \\ \ \textbf{mberdichevsky} \\ \ \textbf{My Documents} \\ \ \textbf{EAST} \\ \ \textbf{Workspaces} \\ \ \textbf{10574633}. \\ \ \textbf{wsp} \\ \ \textbf{AST} \\ \ \textbf{Notation of the particle of the parti$